



## CoCoRaHS

## Spring 2010

# OBSERVER

Tell the National Weather Service How Much Rain or Snow You Got!

CoCoRaHS (Community Collaborative Rain, Hail, and Snow Network) is a non-profit community-based network of volunteers of all backgrounds working to measure and map precipitation. By using low-cost measurement tools and using an interactive website, the goal is to provide the highest quality data for natural resource, education, and research applications.



## New Observers December 1—February 28:

Burlington 2.2 SSE
Summer Shade 4.4 SW
Magnolia 0.7 NNW
Pleasureville 0.6 NE
Leitchfield 0.6 NNE
Crab Orchard 0.8 NNW
Knob Lick 1 WNW

## **WELCOME!**

There are now 278 observers in Kentucky.

Join Our Community! Visit: http://www.cocorahs.org

## In This Issue... Reporting

| Drought Impact Reporting             | 2 |
|--------------------------------------|---|
| Severe Storms Awareness Month        | 3 |
| Tornado Facts                        | 3 |
| Tornado Safety Rules and Definitions | 4 |
| KY CoCoRaHS Data Dec '09—Feb '10     | 5 |
| KY Dec '09—Feb '10 Precipitation Map | 5 |



## **Drought Impact Reporting**

When a tornado rips through a city or a hurricane devastates our seashores, media coverage is swift and thorough as soon as the storm abates. Drought, however, which can affect millions of lives and a large part of the country, often doesn't garner the same kind of excitement despite the fact that drought is one of the most costly natural disasters we experience.

Because drought can be so disastrous, it is imperative that scientists be able to track its development, duration, and effects.

Drought usually develops very gradually, as do the results of the lack of rainfall. Early on in a drought, vegetation may show subtle signs of stress, and streams run lower than normal. As the drought deepens, the effects become more significant. Farmers are often the first to notice drought, as their crops and pastureland suffer from lack of moisture. Wildlife has difficulty finding water, and wildfires are easily sparked. Eventually communities activate water restrictions as rivers and reservoirs steadily lose their water.

While precipitation deficits are an obvious sign of impending and ongoing drought, weather data don't tell the whole story. That's where you can help. Intrepid CoCoRaHS volunteers can serve as the nation's eyes in observing drought conditions. When dry conditions exist in your area, take stock of how they are affecting the community. Are crops suffering? Are stream and reservoir levels running low? Are farm animals or wildlife showing signs of stress? Have you overheard others talking about the dry weather, and its effects?

Please try to remember to enter "0.00" in your morning report on days when no rain has fallen. A missing observation is just that — missing. But an observation of "0" is very meaningful indeed. If you weren't able to enter your "0" observations for a while, you can always go to the "Monthly Zeroes" calendar on the CoCoRaHS website and enter several days of zeroes at once — it's easy and quick.





To submit drought information, simply click on the **Drought Impact Report** link and fill out the form.

A great source of drought information is the National Drought Mitigation Center at http://drought.unl.edu/. You can find the U.S. Drought Monitor there, or go directly to http://drought.unl.edu/dm/monitor.html.

## U.S. Drought Monitor Kentucky

| Norm | DO-04 | DO-04



March 2, 2010



March is Severe Storms Awareness Month in Kentucky. The Blue Grass State receives severe weather every year in the form of tornadoes, large hail, and damaging gusty winds. It is imperative that you have a plan in place **before** severe weather strikes! When the tornado is on top of you, it's too late to start thinking about what you're going to do. Develop severe weather action plans for your home, school, and business now — yes, today! — and <u>practice</u> the plans with your family and coworkers. Then you'll be ready when the storm hits, and rather than having to think, you'll be able to simply *react*.

#### **TORNADOES**

Since 1953 Kentucky has averaged about 12 tornadoes per year, four of which are EF2 or stronger. In 2009 more than two dozen twisters spun across the state, mostly in western and central sections.

The most likely time of year for tornadoes in Kentucky is April through June, though there is a secondary peak in activity in the fall as well. However, tornadoes can occur at any time of year, as was shown recently on January 2, 2006, January 29, 2008, and February 5-6, 2008.

The most usual time of day for tornado activity in Kentucky is between 3pm and 9pm. If conditions are right, however, tornadoes can happen at any time of day or night. On February 6, 2008 an EF3 tornado killed four people in Allen County at 1:45 in the morning.

Tornadoes typically travel from southwest to northeast, though they are capable of moving in any direction. On April 4, 1892 a tornado moved due north in Logan County, and on May 6, 1971 a tornado traveled southward through Danville in Boyle County.

Most tornadoes, about 69%, are weak. Moderate tornadoes account for 29% of all tornadoes, and strong ones are only about 2%. However, strong tornadoes result in 70% of all tornado deaths.

## TORNADOES, continued...

#### **Before the Storm:**

Have a NOAA Weather Radio with a warning alarm tone and battery back-up to receive NWS warnings.

If a Warning is issued or if threatening weather approaches:

- In a building, move to a pre-designated shelter, which should be near the center of the lowest floor available, away from windows. Interior hallways and bathrooms work well.
- If you are caught outdoors, seek shelter in a basement, shelter, or sturdy building. If you cannot quickly walk to a shelter:
- Immediately get into a vehicle, buckle your seat belt and try to drive to the closest sturdy shelter.
- If flying debris hits your vehicle while you are driving, pull over and park. *Now you have the following options as a <u>last resort</u>:*
- If you can safely get lower than the level of the roadway, exit your car and lie in that area, covering your head with your hands.
- If there is no ditch available, stay in the car with the seat belt on. Cover your head and try to get below the level of the windows.
- Mobile homes, even if tied down, offer NO protection from tornadoes and should be abandoned immediately.

Occasionally, tornadoes develop so rapidly that advance warning is simply not possible. Remain vigilant and alert for signs of an approaching tornado, even if there is no warning in effect. YOU must make the decision to seek shelter before the storm arrives. It could be the most important decision you will ever make.

**Tornado Warning**: Take shelter now! A Tornado Warning is issued for an hour or less, for a county or parts of a few counties. It means that either an actual tornado has been sighted, or radar meteorologists at the National Weather Service have indicated the possibility of a tornado developing very soon.

**Tornado Watch**: A watch is issued for several hours and covers states or parts of states. It means that thunderstorms are expected to develop and some may produce tornadoes. When a watch is issued, take a moment to review your severe weather action plan, so you'll be able to act quickly and appropriately if a warning is issued for your area.

**Tornado**: A violently rotating column of air, extending from a shower or thunderstorm cloud, in contact with the ground. Tornadoes are extremely dangerous.

Funnel cloud: A violently rotating column of air, extending from a shower or thunderstorm cloud, not in contact with the ground. Funnel clouds are harmless, but should be monitored in case they develop into a full-fledged tornado.

## Kentucky CoCoRaHS Facts from Winter 2009-2010

Most precipitation: 14.01" at Monticello 9.1 W (Whitley County) Least precipitation: 7.54" at Glencoe 3.8 NNE (Gallatin County) Most snowfall: 40.1" at Morning View 2.9 SW (Kenton County)

Least snowfall: 9.2" at Scottsville 4.9 NE (Allen County)

Heaviest 1-day precipitation: 2.95" at Brodhead 7.3 SSW (Rockcastle County) on December 9 Heaviest 1-day snowfall: 9.2" at Morning View 2.9 SW (Kenton County) on February 16 Deepest snow depth: 16" at Morning View 2.9 SW (Kenton County) February 16-17 Heaviest 1-day total precipitation averaged over the entire state of Kentucky: 1.73" on December 9

## CoCoRaHS volunteers sent in 6,621 daily observations this winter!

## Observers who reported every day Dec 1 - Feb 28:

Scottsville 4.9 NE London 1.7 NE Scottsville 9.2 ESE Irvington 4.5 N Talbert 1.9 ESE Ekron 2.6 ESE Fox Chase 1.4 W New Haven 6.4 NE Bradfordsville 8.5 ENE Park Lake 1.8 NE Irvine 9.9 NNW Mount Vernon 1 E Frankfort 3.3 NE Morehead 6.4 NE Glencoe 3.8 NNE Shelbyville 3.2 E Anchorage 2.8 NE Guthrie 0.8 WNW



